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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,149	11/28/2001	Shawn R. Gettemy	035451-0175 (3721.Palm)	3054

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EXAMINER	
NGUYEN, CHANH DUY	

ART UNIT	PAPER NUMBER
2675	

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/996,149	GETTEMY ET AL.	
	Examiner	Art Unit	
	Chanh Nguyen	2675	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 November 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Preliminary Amendment

1. The preliminary amendment filed on January 24, 2002 has been entered and considered by examiner.

Information Disclosure Statement

2. The references listed on the Information Disclosure Statement filed on March 19, 2002 have been considered by examiner; see attached PTO-1449.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Bodony et al (U.S. Patent No. 6,307,751).

As to claim 1, Bodony discloses a display system (100) , detachable form a host device (713) (see Figure 7 and Figure 19A) including a power source (712), a processor (702) coupled to the power source (712), a memory (708) coupled to the power source (712) and the processor (702). Bodony teaches a flexible electronic display (706) coupled to the processor (702) and the power source (712), a coupler (714) for coupling the flexible electronic display (706) to the host device (713). Bodony teaches a flexible touch screen sensor (touch screen; see column 7, lines 63-66) movable with the flexible electronic display (see column 12, lines 54-64 and column 13, lines 16-25).

As to claim 4, Bodony clearly teaches the host device being a handheld device (see column 9, lines 18-28).

5. Claims 18, 20-21 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Katsura (U.S. Patent No. 6,377,324).

As to claim 18, Katsura discloses a handheld computer including a housing (1 and 2), an expandable display assembly (3-4) supported on the housing (1 and 2), providing a viewing area (4) when the expandable display assembly is folded (i.e. display area 4 is in position folding as shown in figure 3). The claim does not require a viewing area can be viewed by an operator or user or viewer when it is folded. Thus even the area (4) is folded it is still a viewing area. The area (4) does change to a piece of wood or metal when it is folded. The area (4) is still a display area or viewing area when it is folded. Katsura teaches the expandable display assembly (3-4) providing a larger viewing area when expandable display assembly is expanded (see figure 1).

While this is unlike applicant disclose device, this reads on broad claimed language.

As to claim 24, this claim differs from claim 18 in that claim 18 is apparatus whereas claim 24 is method. Thus method claim 24 is analyzed as previously discussed with respect to apparatus claim 18 above. The additional term "sensing" recited in 24 is clearly taught by Katsura as disclosed that "the flexible liquid crystal display panel 4 has, an integral par of it, a touch sensitive input operating part through which data can be entered by touching, not shown" (see column 5, lines 11-16).

As to claims 20-21 Katsura clearly teaches the expandable display (4) being foldable and a handheld computer (i.e. PDA); see column 1, lines 17-20.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 3, 7, 9-10, 13, 15 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodony in view of Katsura (U.S. Patent No. 6,377,324).

As to claim 13, note the discussion of Bodony above, Bodony teaches the disaply assembly as recited in claim 13 with exception of describing the limitation "a foldable". For example, Bodony teaches a display assembly including a power source (712) , a processor (702) coupled to the power source (712), a memory (708) coupled to the power source (712) and the processor (702). Bodony teaches electronic display (706) coupled to the processor (702) and the power source (712), a coupler (714) for coupling the electronic display (706) to the host device (713). Katsural teaches that "the flexible liquid crystal display panel 4 has, an integral par of it, a touch sensitive input operating part through which data can be entered by touching, not shown. Reference numeral 4a denotes a bend that forms in the vicinity of the coupling means 3 when the flexible liquid crystal display panel 4 is bent" (see column 5, lines 11-19). This reads on the claimed "foldable touch sensor foldable with the foldable electronic display". Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the flexible of liquid crystal display panel as taught by Katsura to the flexible display panel of Bodony so as to prevent the bend in the flexible liquid crystal display panel form damage and degradation even its folding and unfolding frequency increases (see column 2,lines 33-38).

As to claim 7, this claim differs from claim 13 in that the limitation expandable to provide a larger viewing area, at least when decoupled from coupler is additionally recited. Combining the expandable display area for providing a larger viewing as taught by Kasura and coupler as taught by Bodony would meet the claimed limitation expandable as recited in claim.

As to claims 3 and 9-10, Katsura clearly teaches the flexible display being foldable (i.e. bendable); see column 5, lines 16-19.

As to claim 15, Bodony clearly teaches a coupler (714) coupled to a handheld computer (713).

As to claim 25, decoupling the flexible display from the handheld computer is taught by Bodony.

9. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodony in view of Comiskey et al (U.S. Application Publication 2003/0067427).

As to claim 2, note the discussion of Bodony above, Bodony does not mention the flexible electronic display being an electronic paper. Comiskey teaches that "the flexible display can be used as an electronic paper" (see page 8, paragraph 0095). Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the electronic paper as taught by Comiskey to the display panel of Bodony because the electronic paper can be used anywhere paper is used today but offers the ability to be updated via stylus (see page 8, paragraph 0095 of Comiskey).

As to claim 5, Comiskey clearly teaches touch sensor including a transparent coating (see page 4, paragraph 0060).

10. Claims 8, 11, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodony in view of Katsura as applied to claims 7 and 13 above, and further in view of Comiskey.

As to claims 8 and 14, note the discussion of Bodony above, Bodony does not mention the flexible electronic display being an electronic paper. Comiskey teaches that "the flexible display can be used as an electronic paper" (see page 8, paragraph 0095). Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the electronic paper as taught by Comiskey to the display panel of Bodony as modified by Katsura because the electronic paper can be used anywhere paper is used today but offers the ability to be updated via stylus (see page 8, paragraph 0095 of Comiskey).

As to claims 11-16, Comiskey clearly teaches touch sensor including a transparent coating (see page 4, paragraph 0060).

11. Claims 19, 22 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsura in view of Comiskey.

As to claim 19, note the discussion of Katsura above, Katsura does not mention the flexible electronic display being an electronic paper. Comiskey teaches that "the flexible display can be used as an electronic paper" (see page 8, paragraph 0095). Therefore, it would have been obvious to one of ordinary skill in the art at the invention

was made to have used the electronic paper as taught by Comiskey to the display panel of Katsura because the electronic paper can be used anywhere paper is used today but offers the ability to be updated via stylus (see page 8, paragraph 0095 of Comiskey).

As to claim 22, Comiskey clearly teaches touch sensor including a transparent coating (see page 4, paragraph 0060).

As to claims 26 and 27, Comiskey clearly teaches using both a finger tip and stylus (20).

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bodony in view of Charlier et al ((U.S. Application Publication 2003/0064751).

As to claim 6, note the discussion of Bodony above, Bodony does not mention an electrotextile. Charlier teaches the use of well-known electrotextile material into the user interface (such as touch pad, key pad); see page 2, paragraph 0029. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used electrotextile material as taught by Charlier to the touch pad of Bodony because the electrotextile sensor can be folded without damage of the sensor.

13. Claims 12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodony in view of Katsura as applied to claims 7 and 13 above, and further in view of Charlier.

As to claims 12 and 17, note the discussion of Bodony above, Bodony does not mention an electrotextile. Charlier teaches the use of well-known electrotextile material into the user interface (such as touch pad, key pad); see page 2, paragraph 0029.

Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used electrotextile material as taught by Charlier to the touch pad of Bodony because the electrotextile sensor can be folded without damage of the sensor.

14. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katsura in view Charlier.

As to claim 23, note the discussion of Katsura above, Katsura does not mention an electrotextile. Charlier teaches the use of well-known electrotextile material into the user interface (such as touch pad, key pad); see page 2, paragraph 0029. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used electrotextile material as taught by Charlier to the touch pad of Katsura because the electrotextile sensor can be folded without damage of the sensor.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chanh Nguyen whose telephone number is (703) 308-6603.

If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Steven Saras can be reached at 305-9720.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

CN

C. Nguyen
November 14, 2003

Chanh Nguyen

CHANH NGUYEN
PRIMARY EXAMINER